

Southern California Water Coalition and Council for Watershed Health
August 10 Stormwater Workshop
Q&A

Is anyone at the Sanitation District or other agencies and municipalities going to investigate the issue of contaminants of emerging concerns (i.e., PFAS and microplastics)? Is there a research plan already set in motion to investigate how green infrastructures can help to capture these contaminants before they reach the river and the ocean?

There was a discussion of addressing contaminants of emerging concern (CECs) as part of the Phase 2 White Paper Study. Source control to prevent CECs from entering our receiving waters and sewer systems in the first place is the best approach. However, once CECs enter our storm drains, dry-weather diversions are a very effective means to prevent the pollutants from reaching downstream receiving waters. Conventional wastewater treatment processes are effective in addressing or reducing the levels of certain CECs. In the case of potable reuse projects, the advanced water treatment process is very effective at removing or destroying CECs. I am not aware of a specific research plan that is underway to evaluate the effectiveness of green infrastructure to address CECs but would suggest checking with the Water Research Foundation or Southern California Coastal Water Research Project.

Can one of the speakers address how maintaining enough water in receiving waters to support beneficial uses is considered with capture and reuse for municipal supply?

Yes, this is an important issue to be considered, and there is quite a bit of scientific work underway, most notably by the Southern California Coastal Water Research Project. For project projects, this issue would need to be evaluated and addressed as part of the project's environmental review/documentation pursuant to the requirements of the California Environmental Quality Act (CEQA).

How is LA Co Sanitation District addressing the Inflow and Infiltration problem? How are you detecting the problem areas?

LACSD addresses inflow and infiltration through the following measures:

- *All LACSD manhole covers are sealed to prevent inflow using corks for pick holes and silicone caulk for gaps along the edges of the cover*
- *A robust sewer inspection program is used to identify defects that could lead to infiltration; sewers receive a condition rating based on the degree of severity of defects, which is used to prioritize the capital improvement program for sewer rehabilitation*
- *Wet weather flow monitoring is conducted where potential sewer capacity issues exist; storm flow data is analyzed to identify potential inflow and infiltration issues and to inform appropriate responses*

As a follow up...What is the timeline for LASAN to develop a permitting guidance document for industrial stormwater?

This program is in place and we do have active permits for facilities that strictly discharge stormwater. These facilities are required to have flow monitoring equipment and are subject to industrial wastewater discharge standards under the provisions of LAMC 64.30, including local limits. The industrial facilities that we permit are allowed to discharge the collected stormwater to the collection system even post storm.

Thanks for your presentations. Dan Lafferty said that Measure W provides about \$280 million/year for projects. Is that for 20 years? What % of MS4 compliance costs will this cover?

There is no set end-date for Measure W but the Board of Supervisors can eliminate the funding measure in 30 years. According to the Safe Clean Water Program [website](#), each municipality must spend at least 70% of their Municipal Program funds annually on new Projects or Programs, which includes operation and maintenance of infrastructure projects built to comply with the 2012 Los Angeles MS4 Permit or 2014 Long Beach MS4 Permit

Will the Metropolitan Water District get involved with the Safe, Clean Water Program (aka Measure W)? There is a great opportunity to synchronize their program with Measure W also (Stormwater Reuse and Stormwater Recharge Pilot Programs).

Good question. Metropolitan is not directly involved in Measure W. The stormwater pilot studies are intended to evaluate the water supply benefit of stormwater. Our member agencies in LA County are able to use the Metropolitan funding from the stormwater study to supplement funding from Measure W. In addition, funding from Measure W may be used as local match for the new construction portion of the stormwater pilot study.

Is bioswale a nature-based solution?

*Bioswales can be nature-based solutions, but it depends on what definition of Nature Based Solution you are using. If you are using the original definition created by IUCN, NBS are actions that protect, “sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, **simultaneously providing human well-being and biodiversity benefits**”, a bioswale would be an NBS if it does all of these things.*

With anticipated revisions to NPDES permits requiring lower concentrations and/or future regulations and inclusion of other CECs, such as PFAS, is there concern how stormwater would affect the ability for your facilities to meet the new discharge thresholds and/or inclusion of CECs that are largely untreatable by POTWs?

Yes, this is a potential concern. It is very important for wastewater agencies to maintain a high level of confidence that they can continue to meet their regulatory requirements. To that end, characterizing the quality of water to be diverted is an important early step in evaluating the feasibility of a dry-weather diversion project. Also, source control can help to prevent CECs and other pollutants from entering the storm drain system in the first place.

Doesn't the calculation of fees based on the amount diverted reduce the availability of stormwater for recycling and thus the potential addition for water supply? Should another basis for fees be explored?
Fees and rate for treatment vary from agency to agency but normally include components for the volume and strength of the wastewater. Diverted urban runoff and first flush stormwater is generally low in strength, so the rate is primarily volume/flow based.

In the past decade or two the treatment capacities of the Sanitation Districts plants was reported to be in excess of 90% explains why storm flow into the sewer was forbidden or at minimum discouraged vigorously. Have conservation efforts by themselves made room for the needed additional SW treatment in the POTWs? Has so much additional treatment capacity been constructed in this time period enabling consideration of SW treatment within the POTWs? Or both?

Robert Ferrante, General Manager of Sanitation Districts of Los Angeles County shared in the webinar that flows have dropped 25% in the last 10-15 years due primarily to indoor water conservation. The white paper will highlight how we now have additional capacity in both the sanitation facility and conveyance system to accept dry weather runoff and possibly some wet weather flows.

Do we need Prop 218 coverage to have a system wide charge for runoff treatment instead of charging cities that have limited funds for this? OCSD allows up to 10 MGD of diversions and recovers costs from the current rate base.

This is an interesting question, but one that probably warrants a legal analysis. We would be interested in learning more about OCSD's program.

What about the heavy metals from brake dust and combustion by products. Where do they go after treatment? what does this do to the sludge quality. What about the plastics and the PFAS related compounds where do they go?? How long before the regulators stop them going to the ocean?

Stormwater pollutants are now being discharged into receiving waters without much treatment, if any. Diverting urban runoff/stormwater to the sewer system provides the opportunity for treatment at a treatment plant. However, the challenge of heavy metals and PFAS is that they are persistent in the environment and treatment processes alike. Preventing these pollutants from entering the environment through source control measures should really be considered.

Could you please share the strategy for expanding the stakeholder networks both large and small sized water reclamation agencies to participate in future phases of this study to facilitate a better representation of the SoCal region?

Good question. Our team, and its 13 partner agencies, are working to share the findings of the Phase 2 White Paper through presentations like this one to expand our network. We're hopeful that reclamation agencies, municipalities and water agencies through CA will look at this approach as a potential strategy to manage urban runoff and some stormwater.

Are wastewater treatment plants able to remove all pollutants from the dry water flow (stormwater diversions)?

Generally, our wastewater treatment plants can remove the pollutants commonly found in dry weather flows, but the study did find that it is important to characterize the quality of the runoff when considering a project. Source control is also an issue that warrants more attention.

How do you make sure the water quality of dry weather runoff will not impact the wastewater treatment plant?

When you consider a project, it is important to review water quality results for the runoff. If those results are not available, samples can be collected and analyzed.

When will LASAN begin programs to consider industrial post storm dry weather flow connections? Industrial facilities facing TMDLs need solutions. They can capture and store water onsite, but they need to discharge relatively clean water to ensure capacity for the next storm event.

Thanks David. I believe the drivers to stimulate participation would vary from agency to agency depending on their respective challenges/opportunities.

During storm events wastewater agencies could be near full capacity (peak wet weather events). Wouldn't you have to limit stormwater capture during these events unless you had some sort of storage of stormwater? That could be very expensive.

Yes, you're right.

Can you water works assure us that you can avoid the LADWP'S massive gaffe commonly referred to as the "toilet to tap" program?

Yes, public acceptance of potable reuse has advanced by leaps and bounds in the last 10 years. Surveys show that 70+% of people understand that we can safely treat and purify our wastewater to produce drinking water. For those who are still uncertain, we have demonstration facilities throughout SoCal, including one at LVMWD, that show how we do it.

With the wastewater reductions due to conservation, is the intent to divert storm water to the sewer collection system to restore some of the d/D?

In short, yes. And, to more fully use the available capacity in the region's wastewater treatment plants.

By improving compliance with MS4 permits for dry weather runoff discharges to wastewater agencies, doesn't that shift more potential liability for non-compliance to the wastewater agency?

live answered

In region 9 we expressly prohibit dry weather flow to the MS4 system.

Erica Ryan, San Diego Water Resources Control Board

Matt O'Malley: Hi Erica. Would the Regional Board consider changing their position on this given the findings in LA?

Erica Ryan: I will review the LA Findings but likely not. There are a lot of exempted flows and a County of San Diego did a study that identified over a million gallons per day of maintenance flow from water districts. But a good question I will discuss with Laurie on this.

Measure W only applies to LA County?

Yes, Measure W created a new property tax in Los Angeles County that raises revenue based on a property's impervious area, this includes rooftops and paved areas. Passed in 2018 Measure W allowed for the creation of the Safe Clean Water Program to create projects that “address how we capture water and how we can reduce our reliance on imported water.” More information can be found here: <https://safecleanwaterla.org/about/vision-mission-goals/>

A couple of years ago, a draft was being written to include schools in the MS4 permit. Has this all but died?

We'll need to forward your question to LARWQCB staff. Schools are a part of the Small Municipal Separate Storm Sewer System (MS4) Phase II Permit. More information can be found here:

https://www.waterboards.ca.gov/water_issues/programs/stormwater/schoolconstfaq.shtml

Is any special equipment required to assure one-way flow from storm drain to sewer (to prevent sewer spills)?

There are a variety of configurations to accomplish this...but the most common is a pumped system with an air gap.

Clean drinking water is a concern to many who live in the 88 cities of Los Angeles County. How will we ensure that diversions that augment our groundwater will be safe to drink - especially with new pharmaceuticals and new contaminants of emerging concern being identified every year?

Potable reuse projects that augment groundwater supplies are required to follow strict regulations established by the State Water Resources Control Board. These projects involve an advanced water treatment process that is effective at removing and destroying pharmaceuticals and constituents of emerging concern. OCWD's GWRS is a great example.

How about a runoff+IPR for a Water Factory 22?

Good idea!

Were the declining flows to the Las Virgenes wastewater treatment facility because of increased conservation? Thank you.

Yes, indoor urban water conservation.

How may we get a copy of the Phase I report?

You can find the Phase 1 report on our website here: <https://socalwater.org/watch-stormwater-matters-webinar-video/>

Will the recording for this event be emailed to the participants?

Yes, we'll send an email out to participants with the link to the video when it is available.

Where/when will recording and slides be available for downloading/copying?

We usually have it ready on our website 24-72 hours after the event, and we send participants an email letting them know where to find it.

Same questions ^^ regarding slides and recording available

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Can you please repeat what "FSA" means? Thanks.

FSA stands for the Future Supply Actions program by Metropolitan Water District.